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DRAFT Strand 1: Number Sense and Operations

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Every student should understand and use all concepts and skills from the previous grade levels. The standards are designed so that new learning builds on preceding skills and are needed to learn new skills. Communication, Problem-solving, Reasoning & Proof, Connections, and Representation are the process standards that are embedded throughout the teaching and learning of mathematical strands.

Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 1. Make a model to represent a given whole number 0 through 20.	PO 1. Make a model to represent a given whole number 0 through 100.	PO 1. Make a model to represent a given whole number 0 through 999.							
PO 2. Identify orally a whole number represented by a model with a word name and symbol 0 through 20.	PO 2. Identify a whole number represented by a model with a word name and symbol 0 through 100.	PO 2. Identify a whole number represented by a model with a word name and symbol 0 through 999.	PO 1. Read whole numbers in contextual situations (through six-digit numbers).	PO 1 Read whole numbers in contextual situations.					
PO 3. Count aloud, forward or backward, in consecutive order (0 through 20).	PO 3. Count aloud, forward or backward, in consecutive order (0 through 100).	PO 3. Count aloud, forward or backward, in consecutive order (0 through 999).							
PO 4. Identify whole numbers through 20 in or out of order.	PO 4. Identify whole numbers through 100 in or out of order	PO 4. Identify whole numbers through 999 in or out of order.	PO 2. Identify six-digit whole numbers in or out of order.	PO 2. Identify whole numbers in or out of order.					
PO 5. Write whole numbers through 20 in or out of order.	PO 5. Write whole numbers through 100 in or out of order.	PO 5. Write whole numbers through 999 in or out of order.	PO 3. Write whole numbers through six-digits in or out of order.	PO 3. Write whole numbers in or out of order.					

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Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 6. Construct equivalent forms of whole numbers, using manipulatives, through 20. (e.g., : ¨ ·+: ¨ · =: ¨ ¨ ·+: ·)	PO 6. Construct equivalent forms of whole numbers, using manipulatives or symbols, through 99. (e.g., 9 + 3 = 6 + 6)	PO 6. State equivalent forms of whole numbers through 999. (e.g., 15 + 5 = 10 + 10)							
PO 7 State verbally whole numbers, through 20, using correct place value. (e.g., a student will read 15 as one ten and five ones).	PO 7. State verbally whole numbers, through 100, using correct place value. (e.g., a student will read 84 as eight tens and four ones)	PO 7. State verbally whole numbers, through 999, using correct place value. (e.g., a student will read 528 as five hundreds, two tens and eight ones)	PO 4. State whole numbers, through six-digits, with correct place value, by using models, illustrations, symbols, or expanded notation. (53,941 = 50,000 + 3,000 + 900 + 40 +1)	PO 4. State place values for whole numbers using symbols. (203,495 = 200,000 + 3,000 + 400 + 90 + 5)					
PO 8. Use manipulatives to construct models that represent place value concepts.	PO 8. Construct models to represent place value concepts for the one's and ten's places.	PO 8. Construct models to represent place value concepts for the one's, ten's, and hundred's places.	PO 5. Construct models to represent place value concepts for the one's, ten's, and hundred's places						

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Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 9. Demonstrate expanded notation using manipulatives. (e.g., model 17 units = one group of ten and seven units: see teacher resource guide)	PO 9. Apply expanded notation to model place value. (37 = 3 groups of ten + 7 units: see teacher resource guide)	PO 9. Apply expanded notation to model place value. (378 = 3 hundreds + 7 tens + 8 ones: see teacher resource guide)	PO 6. Apply expanded notation to model place value, through six digits. (5,378 = 5(1,000) + 3 (100) + 7(10) + 8(1): see teacher resource guide)	PO 5. Apply expanded notation to model place value.					
PO 10. Identify odd and even whole numbers through 20.	PO 10. Identify odd and even whole numbers through 100.	PO 10. Identify odd and even (including 0) whole numbers through 999.	PO 7. Sort whole numbers into sets containing only odd numbers or only even numbers.						
PO 11. Compare two whole numbers through 20.	PO 11. Compare two whole numbers through 100.	PO 11. Compare two whole numbers through 999.	PO 8. Compare two whole numbers, through six-digits.	PO 6. Compare two whole numbers.					
PO 12. Recognize the ordinal numbers through fifth. (i.e., first, second, third, etc.)	PO 12. Use ordinal number through tenth.	PO 12. Use ordinal numbers.							

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Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 13. Order three or more whole numbers through 20 (least to greatest or greatest to least).	PO 13. Order three or more whole numbers through 100 (least to greatest or greatest to least).	PO 13. Order three or more whole numbers through 999 (least to greatest or greatest to least).	PO 9. Order three or more whole numbers through six-digit numbers (least to greatest, or greatest to least).	PO 7. Order three or more whole numbers.					
PO 14. Make models that represent given fractions to show that wholes are made up of parts.	PO 14. Make models that represent given fractions. (halves)	PO 14. Make models that represent given fractions (fourths and eighths).	PO 10. Make models that represent proper fractions.	PO 8. Make models that represent improper fractions.	PO 1. Make models that represent mixed numbers.				
PO 15. Identify the fraction represented by a model with a word name.	PO 15. Identify in symbols and in words a model that is divided into equal fractional parts. (Halves)	PO 15. Identify in symbols and words a model that is divided into equal fractional parts. (Fourths and eights).	PO 11. Identify symbols, words, or models that represent proper fractions.	PO 9. Identify symbols, words, or models that represent improper fractions.	PO 2. Identify symbols, words, or models that represent mixed numbers.	PO 1. Express fractions as ratios, comparing two whole numbers. (e.g., ¾ is equivalent to 3:4 and 3 to 4)			

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Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
			PO 12. Use proper fractions in contextual situations.	PO 10. Use improper fractions in contextual situations.	PO 3. Use mixed numbers in contextual situations.				
			PO 13. Compare two unit fractions or proper fractions with like denominators.	PO 11. Compare two unit fractions or proper or improper fractions with like denominators.	PO 4. Compare two unit fractions, proper fractions with like denominators or mixed numbers with like denominators.	PO 2. Compare two proper fractions, improper fractions or mixed numbers.			
			PO 14. Order three or more unit fractions or proper fractions with like denominators.	PO 12. Order three or more unit fractions or proper or improper fractions with like denominators.	PO 5. Order three or more unit fractions, proper or improper fractions with like denominators or mixed numbers with like denominators.	PO 3. Order three or more proper fractions, improper fractions or mixed numbers.			

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Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 16. Name penny, nickel, dime, quarter, and dollar by using manipulatives or pictures.	PO 16. Identify money by name and value: penny, nickel, dime, quarter, and one-dollar.	PO 16. Count money through $5.00 using manipulatives and pictures.	PO 15. Count amounts of money through $20.00 using pictures or actual bills and coins.						
	PO 17. Identify the value of a collection of coins using the symbols ¢ and $.	PO 17. Identify the value of a collection of money using the symbols ¢ and $ through $5.00.							
		PO 18. Use decimals through hundredths in contextual situations.	PO 16. Use decimals through thousandths in contextual situations.	PO 13. Use decimals in contextual situations.					
		PO 19. Compare two decimals, through hundredths, using models, illustrations, or symbols.	PO 17. Compare two decimals, through thousandths, using models, illustrations, or symbols.	PO 14. Compare two decimals.	PO 6. Compare two whole numbers, fractions, and decimals.				

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Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
		PO 20. Order three or more decimals, through hundredths, using models, illustrations, or symbols.	PO 18. Order three or more decimals, through thousandths, using models, illustrations, or symbols.	PO 15. Order three or more decimals.	PO 7. Order whole numbers, fractions, and decimals.				
		PO 21. Distinguish the equivalency among decimals, fractions and percents. (e.g., 1/2=0.50=50%, 1/4 = 0.25=25%)	PO 19. Determine the equivalency among decimals, fractions, and percents. (e.g., 1/10 = 0.1=10%, 1/5 = 0.2=20%)	PO 16. Determine the equivalency among decimals, fractions, and percents. (e.g., 1/20 = 0.05=5%, 1/25 = 0.04=4%, 1/50 = 0.02=2%)	PO 8. Determine the equivalency between and among fractions, decimals, and percents in contextual situations.	PO 4. Determine the equivalency between and among fractions, decimals, and percents in contextual situations.	PO 1. Express fractions as terminating or repeating decimals.		
			PO 20. Identify all whole-number factors and pairs of factors for a given whole number through 24.	PO 17. Identify all whole-number factors and pairs of factors for a given whole number through 144.	PO 9. Identify all whole number factors and pairs of factors for a number.	PO 5. Identify the greatest common factor for two whole numbers.	PO 2. Identify the greatest common factor for a set of whole numbers.		
			PO 21. Determine multiples of a given whole number with products through 24.	PO 18. Determine multiples of a given whole number with products through 144.	PO 10. Recognize that 1 is neither a prime nor a composite number.	PO 6. Determine the least common multiple for two whole numbers.	PO 3. Determine the least common multiple for a set of whole numbers.		

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Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
					PO 11. Sort whole numbers (through 50) into sets containing only prime numbers or only composite numbers.	PO 7. Express a whole number as a product of its prime factors using exponents when appropriate.			
							PO 4. Choose the appropriate signed real number to represent a contextual situation, including absolute value.		
							PO 5. Locate integers on a number line.	PO 1. Locate rational numbers on a number line.	
							PO 6. Order integers.	PO 2. Identify irrational numbers.	PO 1. Classify numbers as members of one or more of subsets of the real number system: natural, whole, integers, rational, or irrational numbers.

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Concept 1: Number Sense									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
				.			PO 7. Classify numbers as natural numbers, whole numbers, and integers.	PO 3. Classify numbers as rational or irrational.	PO 2. Compare subsets of the real number system with regard to these properties: commutative, associative, distributive, identity, inverse, and closure.
									PO 3. Distinguish between finite and infinite sets of numbers.

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 1. Demonstrate the process of addition using manipulatives.	PO 1. Demonstrate the process of addition using manipulatives.	PO 1. Demonstrate the process of addition through two three-digit whole numbers, using manipulatives.							
PO 2. Demonstrate the process of subtraction using manipulatives.	PO 2. Demonstrate the process of subtraction using manipulatives.	PO 2. Demonstrate the process of subtraction using manipulatives through two three-digit whole numbers.	PO 1. Demonstrate the process of subtraction using manipulatives through two three-digit whole numbers.						
PO 3. State addition facts for sums through 18 and subtraction for differences with minuends through 9 or less.	PO 3. State addition facts for sums through 18 and subtraction for differences with minuends through 9 or less.	PO 3. State addition and subtraction facts.							

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
	PO 4. Add one- and two-digit whole numbers without regrouping.	PO 4. Add one- and two-digit whole numbers with regrouping.	PO 2. Add two three-digit whole numbers.	PO 1. Add whole numbers.			PO 1. Add integers		
	PO 5. Subtract one- and two-digit whole numbers without regrouping.	PO 5. Subtract one- and two-digit whole numbers with regrouping.	PO 3. Subtract two three-digit whole numbers.	PO 2. Subtract whole numbers.			PO 2. Subtract integers		
		PO 6. Add 3 one- or two-digit addends.	PO 4. Add a column of numbers.						
PO 4. Select the operation to solve word problems using numbers 0 through 9.	PO 6. Select the grade level appropriate operation to solve word problems.	PO 7. Select the grade level appropriate operation to solve word problems.	PO 5. Select the grade level appropriate operation to solve word problems.	PO 3. Select the grade level appropriate operation to solve word problems.	PO 1. Select the grade level appropriate operation to solve word problems.	PO 1. Select the grade level appropriate operation to solve word problems.	PO 3. Select the grade level appropriate operation to solve word problems.	PO 1. Select the grade level appropriate operation to solve word problems.	PO 1. Select the grade level appropriate operation to solve word problems.
PO 5. Solve word problems using addition or subtraction with numbers through 9.	PO 7. Solve word problems using addition and subtraction of 2-digit numbers without regrouping.	PO 8. Solve word problems using addition and subtraction of two 2-digit numbers, with regrouping AND two 3-digit numbers without regrouping.	PO 6. Solve word problems using grade level appropriate operations and numbers.	PO 4. Solve word problems using grade level appropriate operations and numbers.	PO 2. Solve word problems using grade level appropriate operations and numbers.	PO 2. Solve word problems using grade level appropriate operations and numbers.	PO 4. Solve word problems using grade level appropriate operations and numbers.	PO 2. Solve word problems using grade level appropriate operations and numbers.	PO 2. Solve word problems using grade level appropriate operations and numbers.

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Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
	PO 8. Count by multiples to show the process of multiplication (10s, 5s, or 2s).	PO 9. Count by multiples of three.	PO 7. Demonstrate the process of multiplication as repeatedly adding the same number, counting by multiples, combining equal sets, and making arrays.	PO 5. Multiply multi-digit numbers by two-digit numbers.	PO 3. Multiply whole numbers.		PO 5. Multiply integers.		
			PO 8. Demonstrate the process of division (Separating elements of a set into smaller equal sets, sharing equally, or repeatedly subtracting the same number).	PO 6. Divide with one- or two-digit divisors.	PO 4. Divide with whole numbers.		PO 6. Divide integers.		
	PO 9. Demonstrate families of equations for addition and subtraction.	PO 10. Demonstrate families of equations for multiplication and division.	PO 9. Demonstrate families of equations for multiplication and division.						

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
		PO 11. State multiplication and division facts: 2s, 3s, 5s and10s.	PO 10. State multiplication and division facts through 9s.	PO 7. State multiplication and division facts through 12s.					
	PO 10. Demonstrate the identity and commutative properties of addition.	PO 12. Demonstrate the associative property of addition.	PO 11. Demonstrate the commutative and identity properties of multiplication.	PO 8. Demonstrate the associative and distributive properties of multiplication.	PO 5. Demonstrate the addition and multiplication properties of equality.				
	PO 11. Identify addition and subtraction as inverse operations.		PO 12. Identify multiplication and division as inverse operations.					PO 3. Identify squaring and finding square roots as inverse operations.	
		PO 13. Apply grade level appropriate properties to assist in computation.	PO 13. Apply grade level appropriate properties to assist in computation.	PO 9. Apply grade level appropriate properties to assist in computation.	PO 6. Apply grade level appropriate properties to assist in computation.	PO 3. Apply grade level appropriate properties to assist in computation.	PO 7. Apply grade level appropriate properties to assist in computation.	PO 4. Apply grade level appropriate properties to assist in computation.	PO 3. Use concepts of signed numbers and absolute value to simplify numerical expressions.
PO 6. Apply the symbols: +, -, =	PO 12. Apply the symbols: ≠, <, >.	PO 14. Recognize the symbols: ×, ÷, /, ∗, %, and the grouping symbols ( ).	PO 14. Apply the symbols: ×, ÷, /, ∗, %, and the grouping symbols ( ) and “,”.	PO 10. Apply the symbol: • and ( ) for multiplication, and ≤, ≥ .	PO 7. Apply the symbol “[ ]” to represent grouping.	PO 4 Apply the symbols for “…” or “‾‾” to represent repeating decimals and “:” to represent ratios, superscripts as exponents.	PO 8. Apply the symbols + and – to represent positive and negative, “| |” to represent absolute value,	PO 5. Apply the symbols “√” to represent square root, “±” to represent roots, “{}” as grouping symbols.	PO 4. Apply subscripts to represent ordinal position.

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 7. Use grade level appropriate mathematical terminology.	PO 13. Use grade level appropriate mathematical terminology.	PO 15. Use grade level appropriate mathematical terminology.	PO 15. Use grade level appropriate mathematical terminology.	PO 11. Use grade level appropriate mathematical terminology.	PO 8. Use grade level appropriate mathematical terminology.	PO 5. Use grade level appropriate mathematical terminology.	PO 9. Use grade level appropriate mathematical terminology.	PO 6. Use grade level appropriate mathematical terminology.	PO 5. Use grade level appropriate mathematical terminology.
					PO 9. Simplify fractions to lowest terms.	PO 6. Simplify fractions to lowest terms.			
	PO 14. Demonstrate addition of fractions with like denominators (halves) using models.	PO 16. Demonstrate addition of fractions with like denominators (fourths and eighths) using models.							
	PO 15. Demonstrate subtraction of fractions with like denominators (halves) using models.	PO 17. Demonstrate subtraction of fractions with like denominators (fourths and eighths) using models.	PO 16. Add or subtract fractions appropriate to grade level.	PO 12. Add or subtract fractions appropriate to grade level.	PO 10. Add or subtract fractions appropriate to grade level.	PO 7. Add or subtract proper fractions and mixed numbers with like denominators with regrouping.			
						PO 8. Add or subtract proper fractions and mixed numbers with unlike denominators with regrouping.			

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
						PO 9. Demonstrate the process of multiplication of proper fractions using models.			
						PO 10. Multiply proper fractions.			
						PO 11. Multiply mixed numbers.			
						PO 12. Demonstrate that division is the inverse of multiplication of proper fractions.			
						PO 13. Divide proper fractions.			
						PO 14. Divide mixed numbers.			
	PO 16. Add and subtract money using manipulatives and paper and pencil, through $2.00.	PO 18. Add and subtract money using manipulatives and paper and pencil, through $5.00.	PO 17. Apply addition and subtraction in contextual situations, through $20.00.	PO 13. Apply multiplication and division of money in contextual situations.	PO 11. Add or subtract decimals.				

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
					PO 12. Multiply decimals.				
					PO 13. Divide decimals.		PO 10. Calculate the missing value in a base•rate= percentage problem.		
						PO 15. Solve problems involving fractions or decimals (including money) in contextual situations.			
							PO 11. Convert numbers expressed in standard notation to scientific notation and vice versa. (positive exponents only)	PO 7. Convert standard notation to scientific notation and vice versa.	PO 6. Compute using scientific notation.

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Concept 2: Numerical Operations									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
				PO 14. Simplify numerical expressions using the order of operations with grade appropriate operations on number sets.	PO 14. Simplify numerical expressions using the order of operations with grade appropriate operations on number sets.	PO 16. Simplify numerical expressions using the order of operations with grade appropriate operations on number sets.	PO 12. Simplify numerical expressions using the order of operations with grade appropriate operations on number sets.	PO 8. Simplify numerical expressions using the order of operations with grade appropriate operations on number sets.	PO 7. Simplify numerical expressions using the order of operations.

Concept 3: Estimation									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
PO 1. Solve problems using a variety of mental computations and reasonable estimations.	PO 1. Solve problems using a variety of mental computations and reasonable estimation.	PO 1. Solve problems using a variety of mental computations and reasonable estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.	PO 1. Solve grade level appropriate problems using estimation.
				PO 2. Use estimation to verify the reasonableness of a calculation. (e.g., Is 3284 x 343 = 1200 reasonable?)	PO 2. Use estimation to verify the reasonableness of a calculation. (e.g., Is 4.1 x 2.7 about 12?)	PO 2. Use estimation to verify the reasonableness of a calculation. (e.g., Is 5/9 x 3/7 more than 1?)	PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is –2.5 x 18 about –50?)	PO 2. Use estimation to verify the reasonableness of a calculation. (e.g., Is 32 the square root of 64?)	PO 2. Determine if a solution to a problem is reasonable.
	PO 2. Estimate the measurement of an object using standard and non-standard units of measurement.	PO 2. Estimate the measurement of an object using standard and non-standard units of measurement.	PO 2. Estimate length and weight using U.S. customary units.	PO 3. Estimate length and weight using both U.S. customary and metric units.	PO 3. Round to estimate quantities.	PO 3. Round to estimate quantities in contextual situations. (e.g., round up or round down)	PO 3. Determine whether an estimation of an area is approximately equal to the actual measure.	PO 3. Express answers to the appropriate place or degree of precision. (e.g., time and money)	PO 3. Determine rational approximations of irrational numbers.

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Concept 3: Estimation									
Kindergarten	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
			PO 3. Record estimated and actual linear measurements for real life objects (e.g. length of fingernail; height of desk).	PO 4. Make estimates and measurements for distance	PO 4. Make estimates and measurements for area and perimeter.	PO 4. Make estimates and measurements for the area and perimeter of polygons using a grid.	PO 4. Determine whether an estimation of an angle is approximately equal to the actual measure.		
		PO 3. Compare an estimate to the actual measure.	PO 4. Compare estimations of appropriate measures to the actual measures.		PO 5. Compare estimated measurements between U.S. customary and metric systems. (e.g. a yard is about a meter)		PO 5. Determine whether an estimation of the circumference of a circle is approximately equal to the actual measure.		
		PO 4. Evaluate the reasonableness of an estimate.	PO 5. Evaluate the reasonableness of estimated measures.			PO 5. Verify the reasonableness of estimates made from calculator results within a contextual situation.	PO 6. Verify the reasonableness of estimates made from calculator results within a contextual situation.	PO 4. Verify the reasonableness of estimates made from calculator results within a contextual situation	